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THE
Surgical Instruments of the Hindus





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THE SURGICAL INSTRUMENTS OF THE HINDUS

WITH

**A Comparative Study of the Surgical Instruments of
the Greek, Roman, Arab and the Modern
European Surgeons**

BY

GIRINDRANĀTH MUKHOPĀDHYĀYA, B.A., M.D.

*Fellow of the Calcutta University, McLeod Gold Medalist in Surgery, Formerly
Lecturer on Surgery, Calcutta Medical School and College of Physicians
and Surgeons (Bengal), Member of the Asiatic Society of Bengal,
Life Member and Professor of Botany, Indian Association
for the Cultivation of Science, Examiner,
Calcutta University.*



Griffith Prize Essay for 1909

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PREFACE

Much trouble has been taken with our illustrations, but the author is fully conscious of their many defects. I am greatly indebted to several authors mentioned in the legends to the plates as the readers will find certain of their illustrations copied in this volume. It was found necessary in a comparative study of the surgical instruments used by the different nations of the world. It has been my wish to render due credit to all persons for the illustrations by which they may severally have contributed to the advancement of our knowledge of the subject, and I have never assumed to myself drawings, which belong to others. For those illustrations, not otherwise acknowledged, the author is solely responsible.

For his skill and patience in drawing and printing these figures I am glad to take this opportunity of thanking Mr. K. V. Seyne.

The author deems it a pleasant duty to express his thanks to the University of Calcutta for the liberality displayed in the matter of illustrations.

80, RUSSA ROAD NORTH, }
Calcutta, February, 1914. } G. N. MUKHOPĀDHYĀYA.

ABBREVIATIONS

- Adams : The Genuine Works of Hippocrates. Translated
by Francis Adams, LL.D. in two volumes.
(Sydenham Society).
- A. H. : Catalogue of Surgical Instruments and
Appliances. Allen and Hanburys Ltd. 1903.
- A. S. : Catalogue of Surgical Instruments and
Appliances. Arnold and Sons. 1895.
- Anderson : See Wellcome.
- B. B. : Surgical Instruments and Appliances. Burgoyne,
Burbidges & Co.
- C. C. G. : Collection de Chirurgiens Grecs. Bibliothèque
Nationale. Paris.
- Erichsen : The Science and Art of Surgery. By Sir John
Eric Erichsen Bt., F.R.S., LL.D. Tenth
Edition. 1895.
- Esmarch : The Surgeon's Handbook of the Treatment of
Wounded in War. By Dr. Friedrich Esmarch.
- Heath : Minor Surgery and Bandaging. By C. Heath,
F.R.C.S. Second Edition.
- I. M. G. : Indian Medical Gazette, 1904.
- K. S. : Catalogue of Surgical Instruments. Kny-
Scheerer & Co.
- Milne : Surgical Instruments in Greek and Roman
Times. By T. S. Milne, M.A., M.D., 1907.
- Porter : The Surgeon's Pocket-Book. The Best
Treatment of Wounded in War. By
Surgeon-Major T. H. Porter. 1891.
- Princep : Princep's (Thomas') Indian Antiquities.

- Swain : Surgical Emergencies. By W. P. Swain,
F.R.C.S. Third Edition. 1880.
- Thakore Saheb : History of Aryan Medical Science. By H. H.
Sir Bhagvat Singh Jee., K.C.I.E., M.D.,
D.C.L., LL.D., F.R.C.P.E. Thakore Saheb
of Gondal. 1896.
- Waggett : Diseases of the Nose. By E. B. Waggett,
M.A., M.B., B.C. 1907.
- Wellcome : Third Report of the Wellcome Research
Laboratories at the Gordon Memorial College,
Khartoum.
- White : The Veterinary Art. By James White. 1851.
-

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„	108	„	LIV	„	6	„	5	„	6
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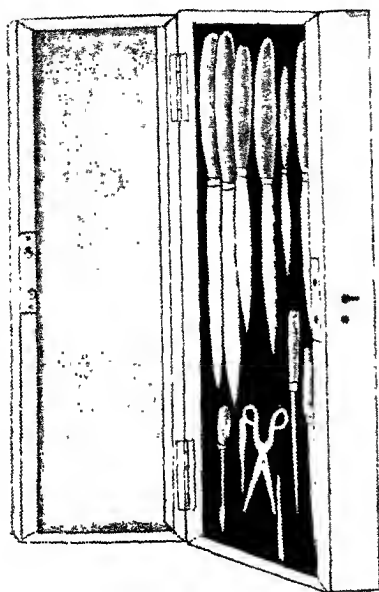
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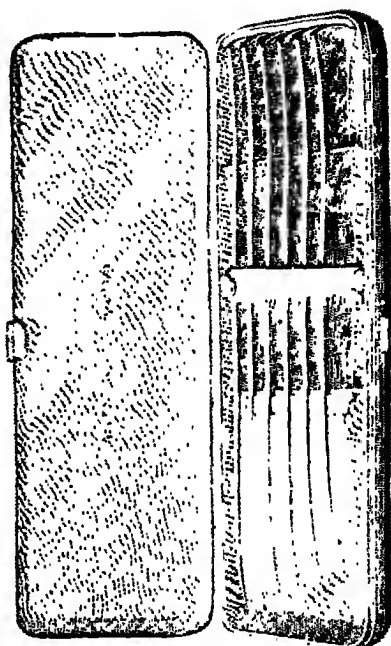
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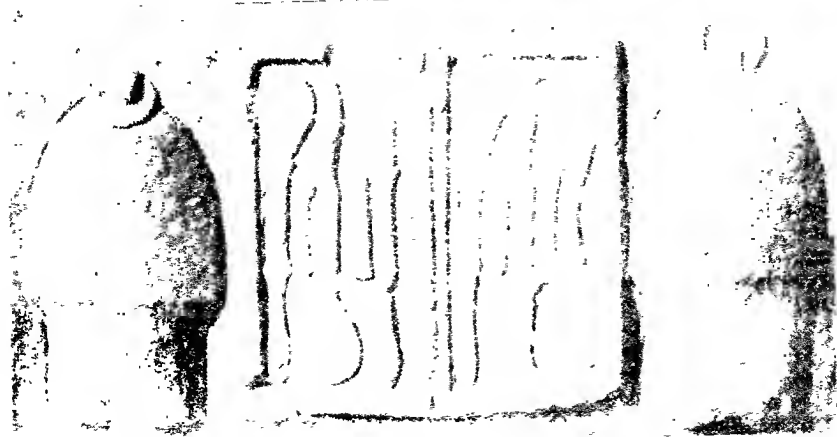
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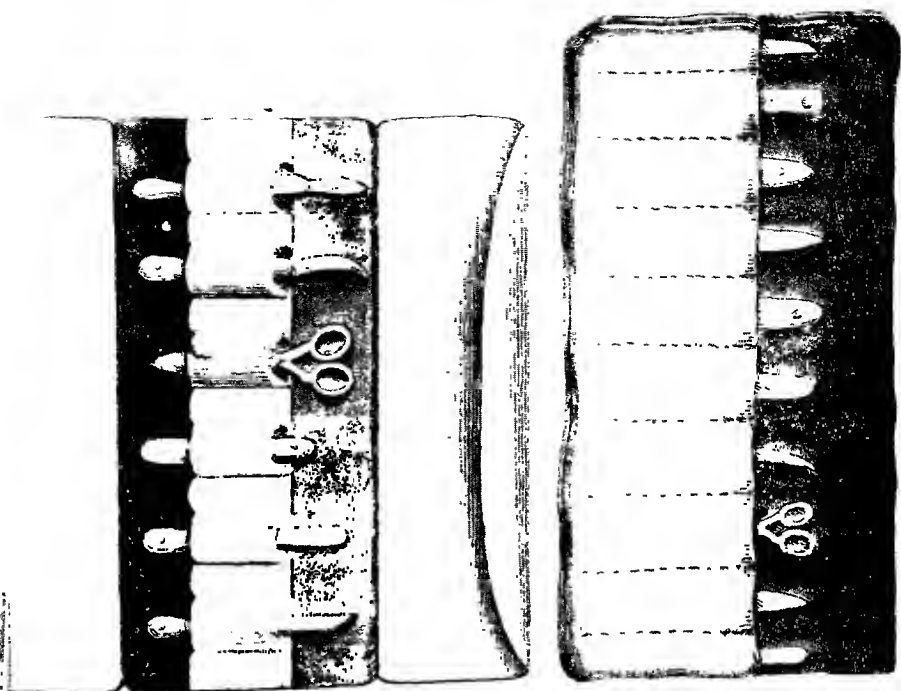
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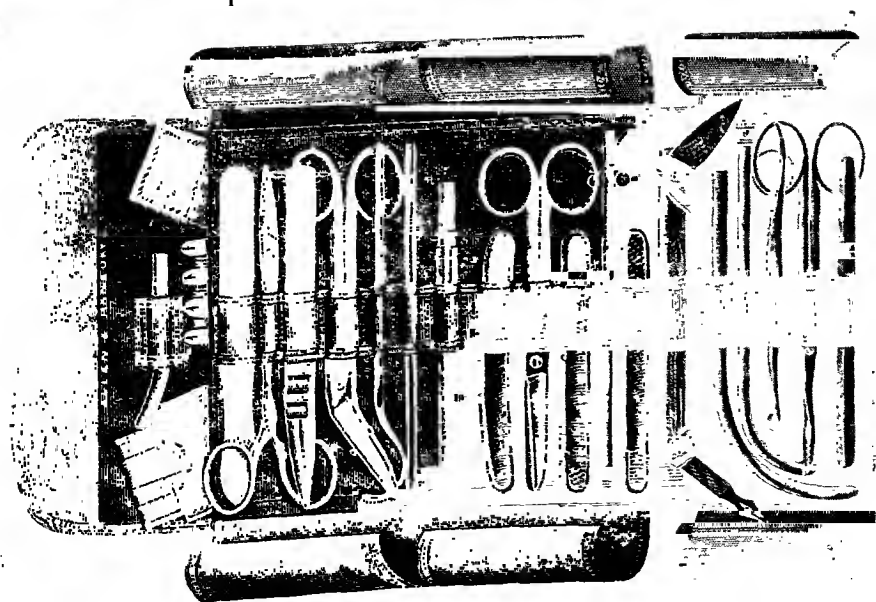
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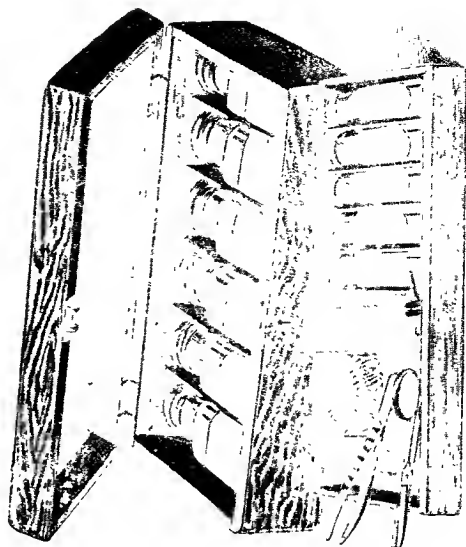
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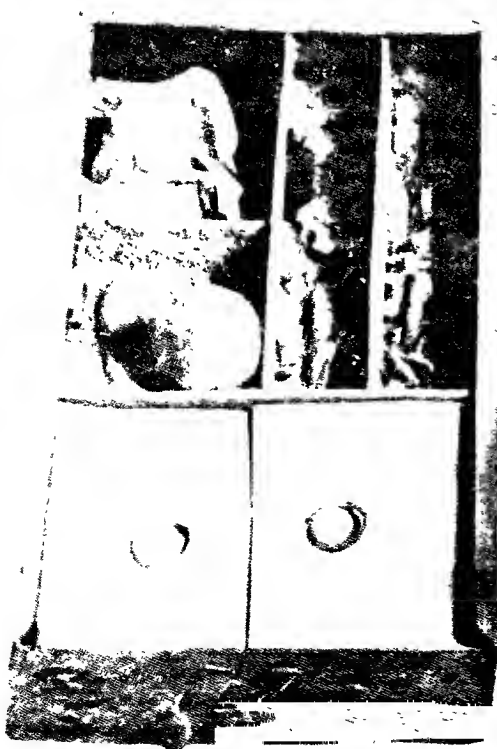
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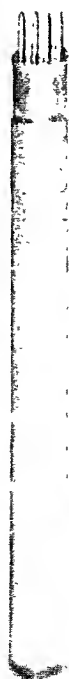
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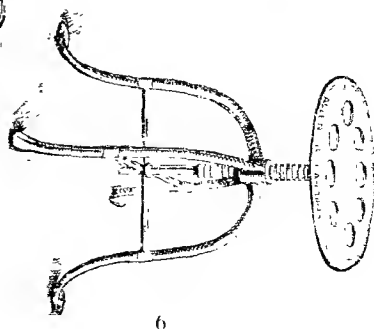
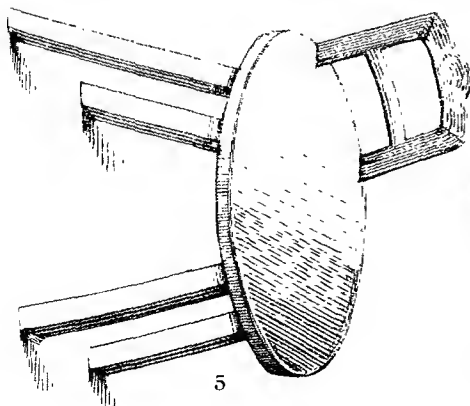
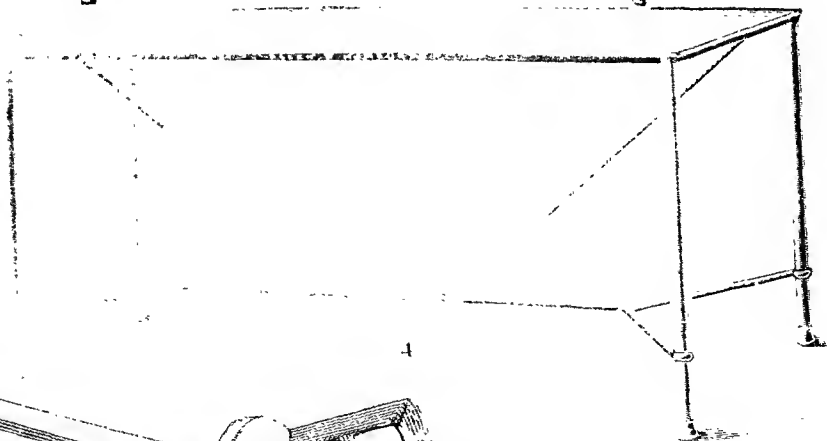
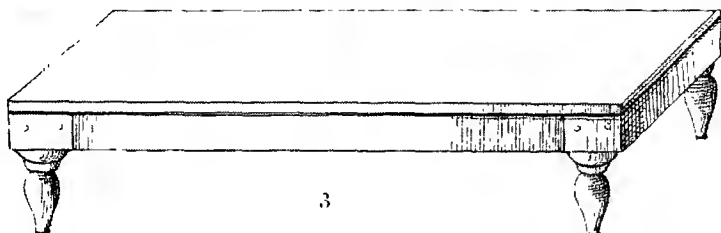
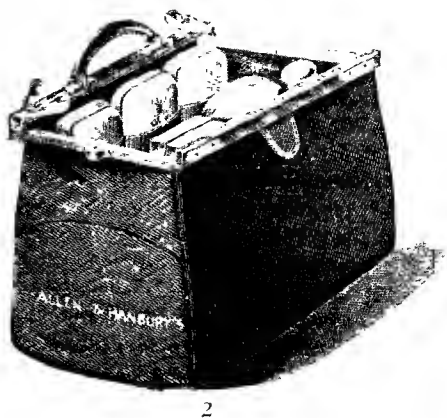


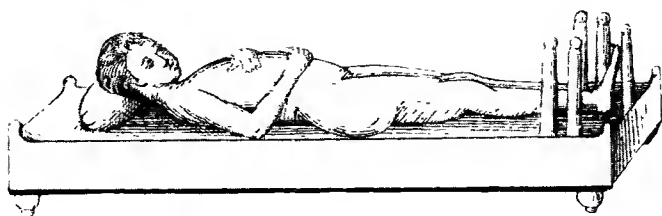
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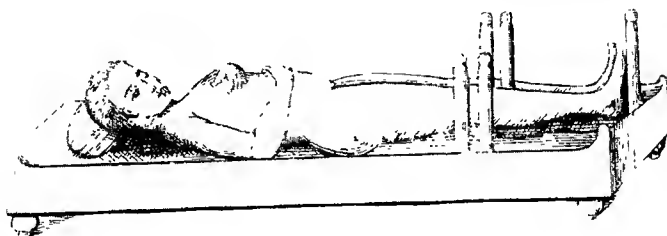
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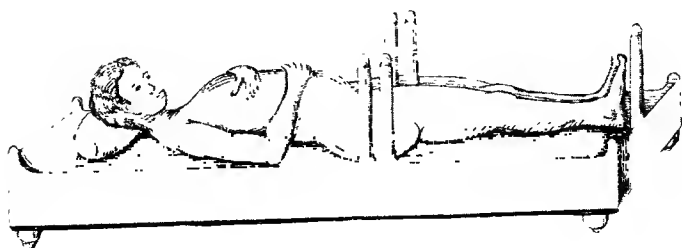
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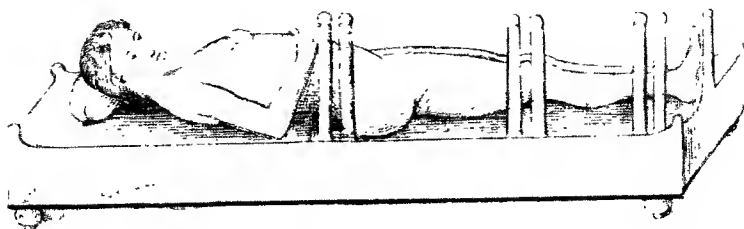
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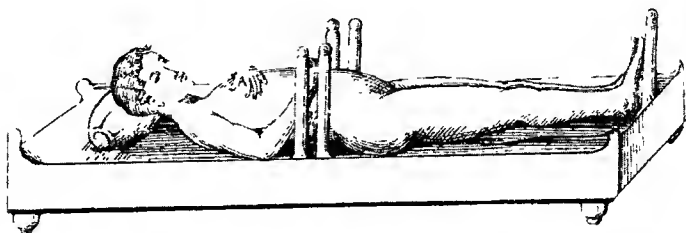
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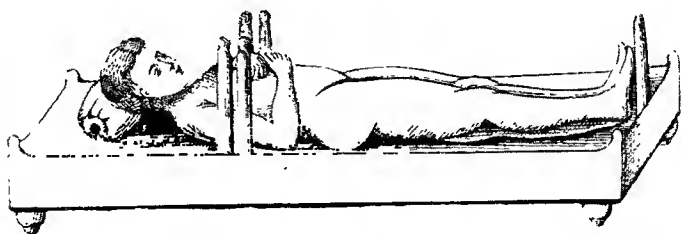
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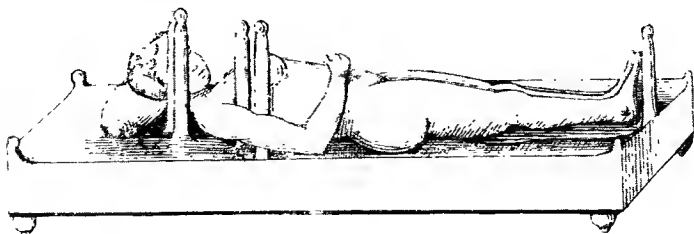
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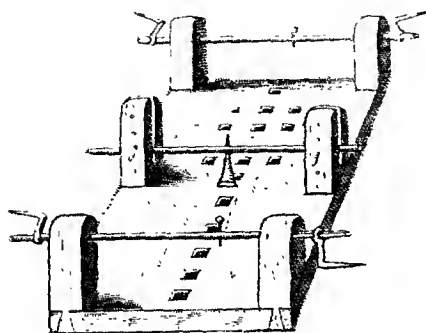
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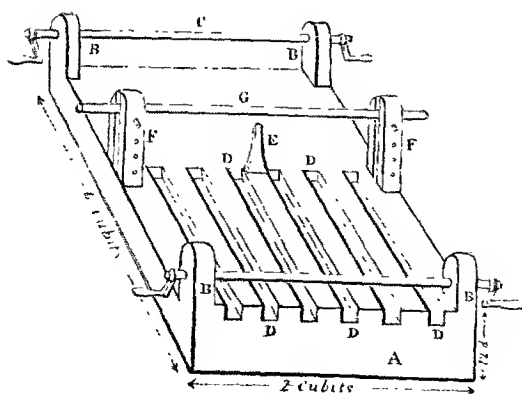
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Plate VII.



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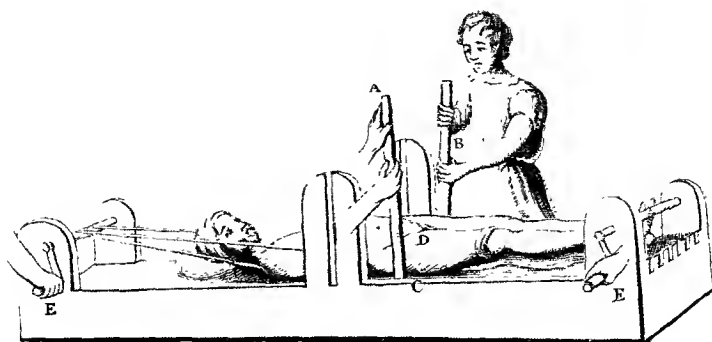
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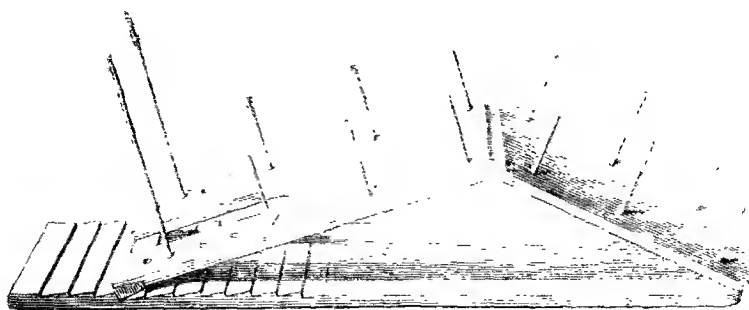
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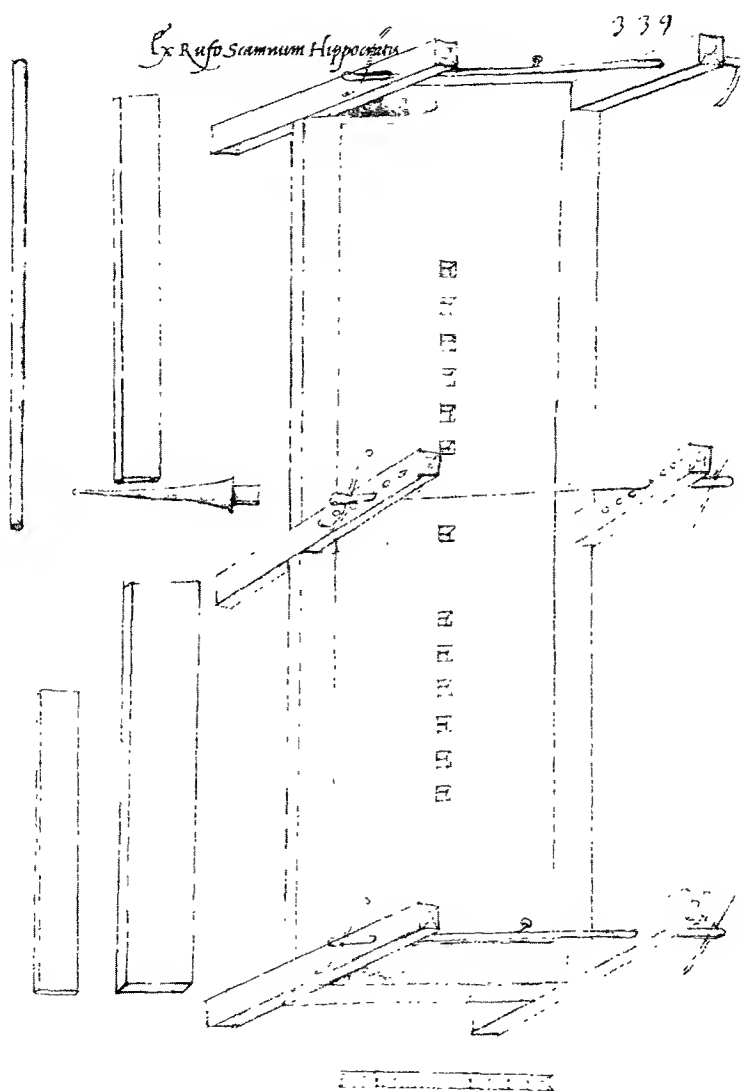


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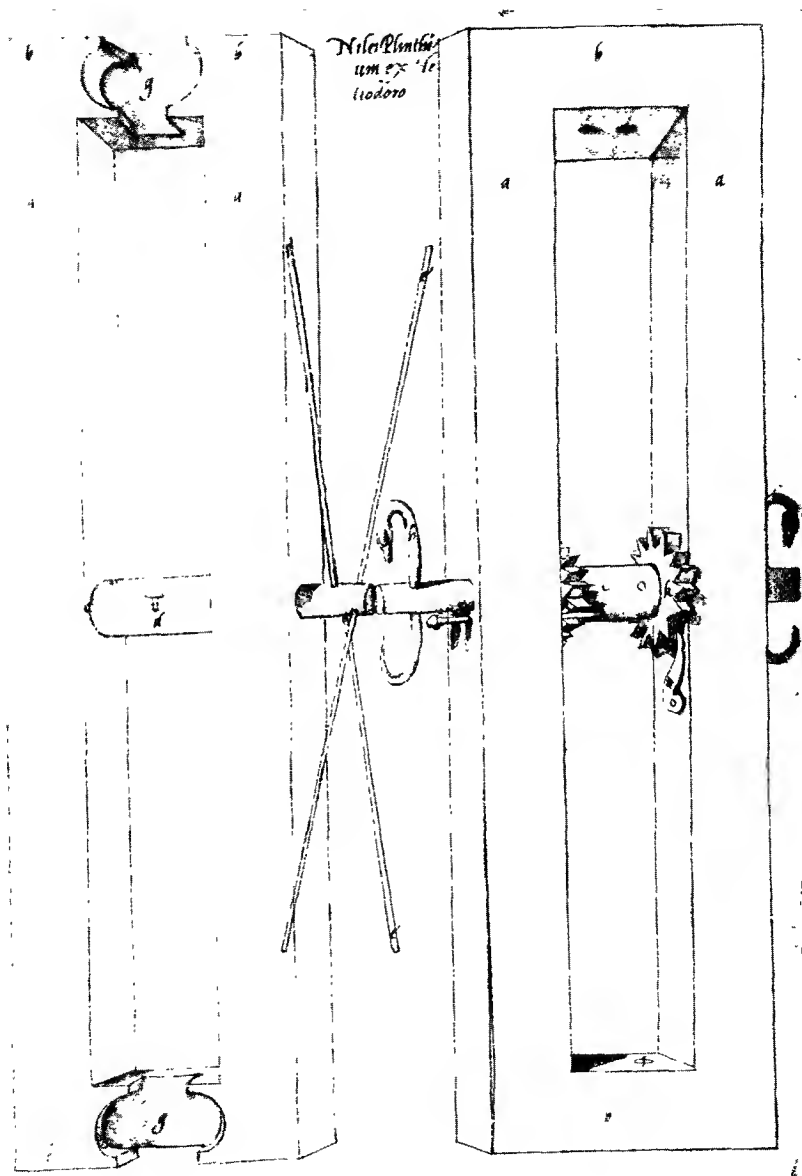


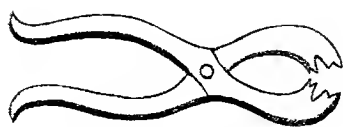
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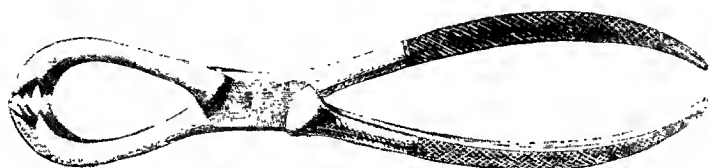
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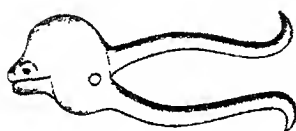
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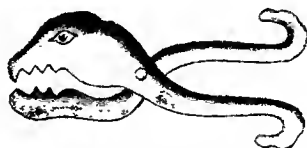
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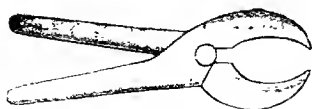
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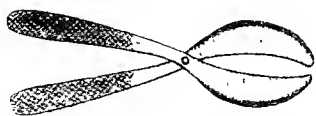
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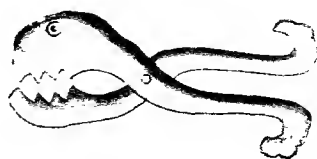
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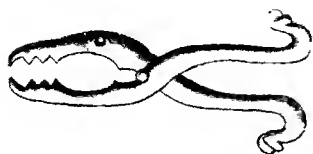
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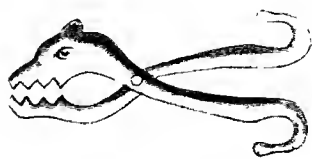
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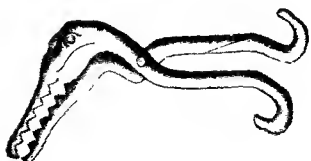
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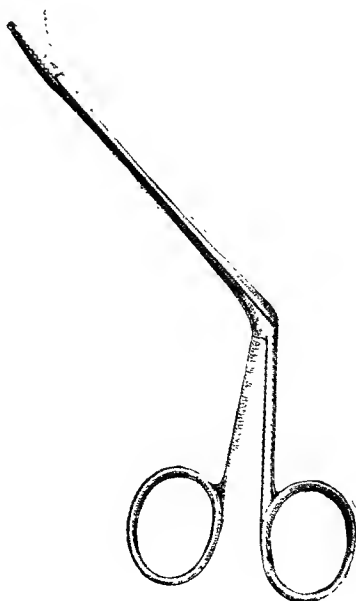
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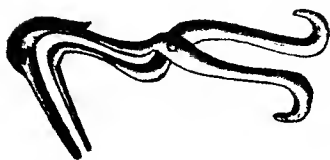
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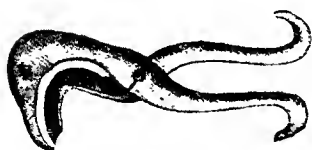
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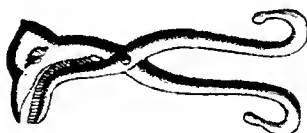
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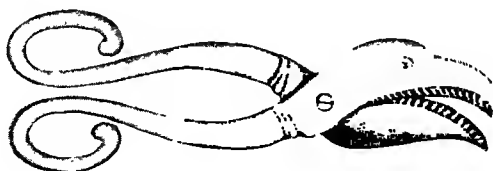
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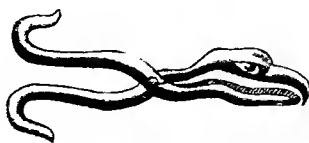
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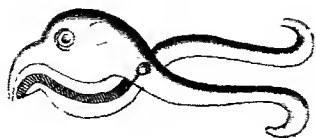
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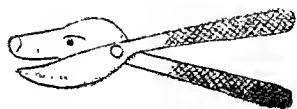
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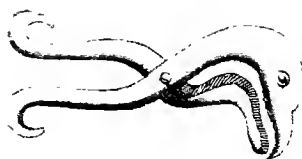
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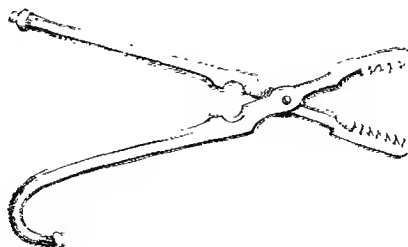
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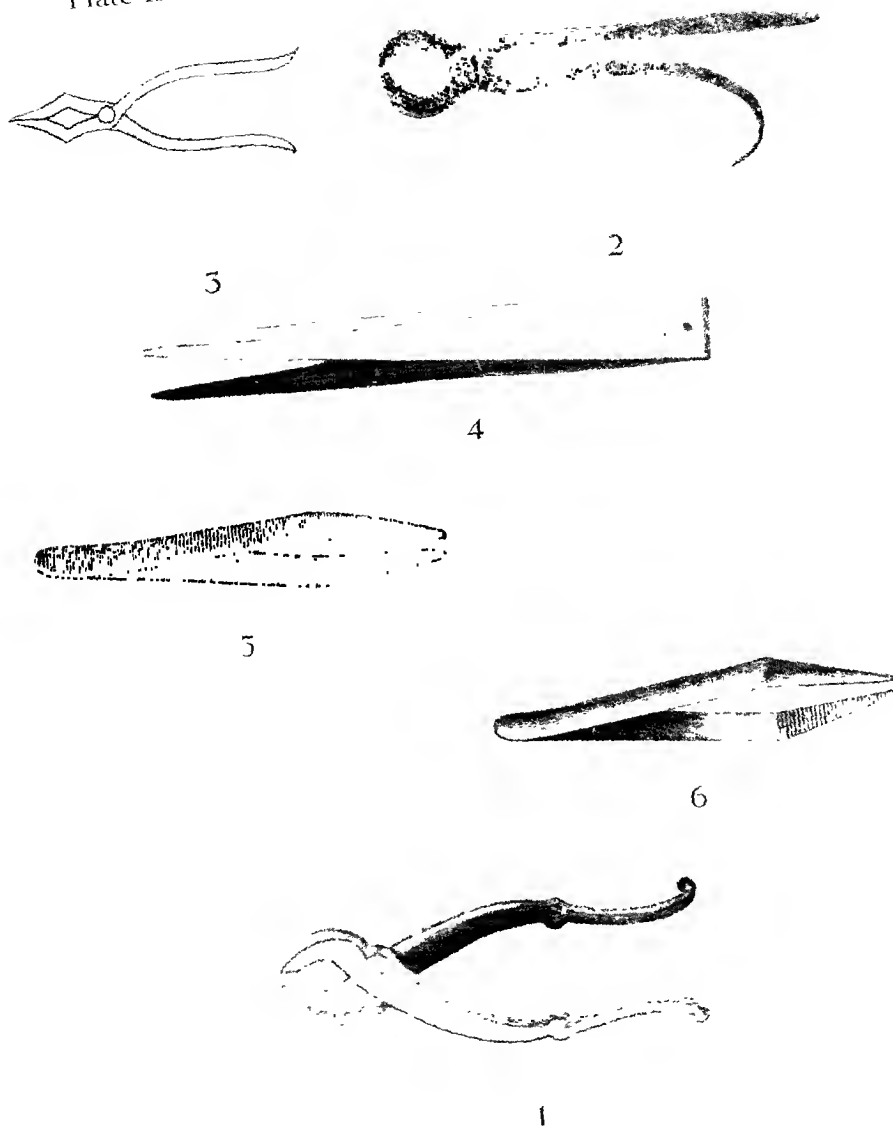


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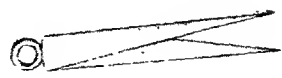
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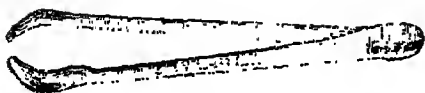
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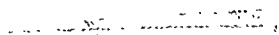
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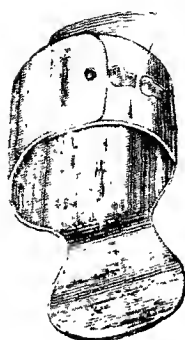
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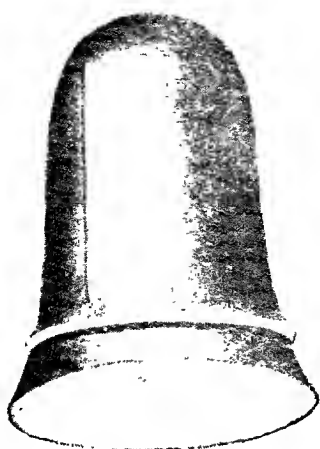
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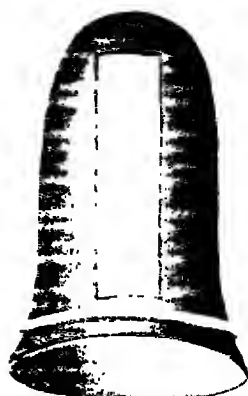
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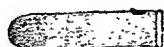
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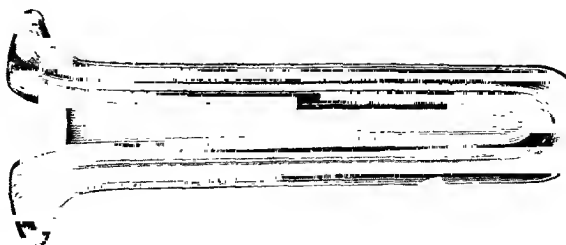
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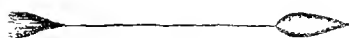
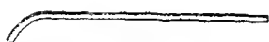
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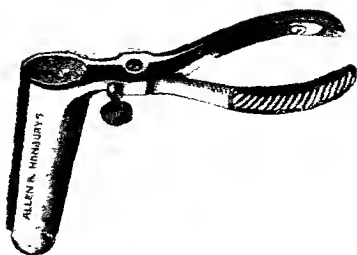
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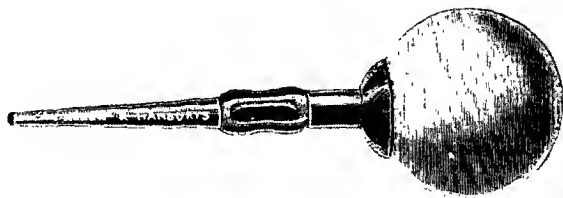
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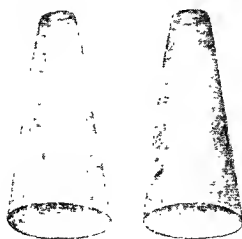
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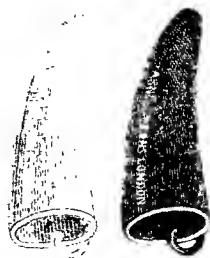
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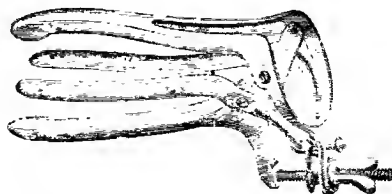
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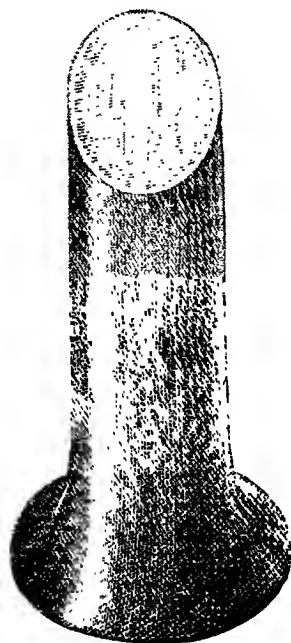
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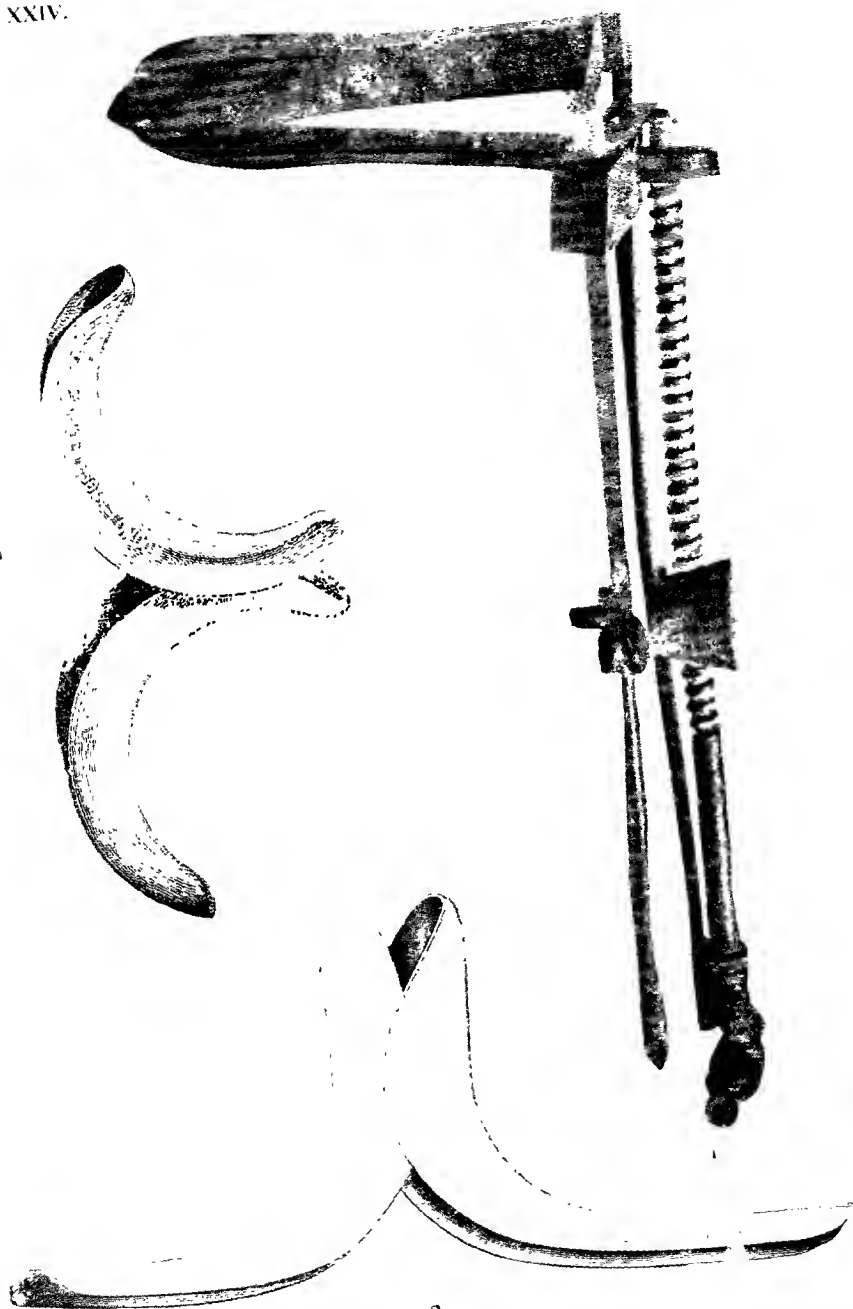
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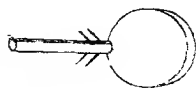
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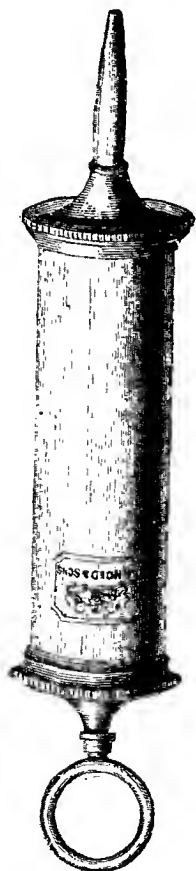
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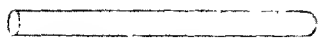
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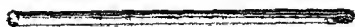
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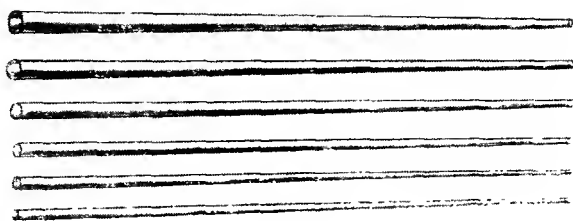
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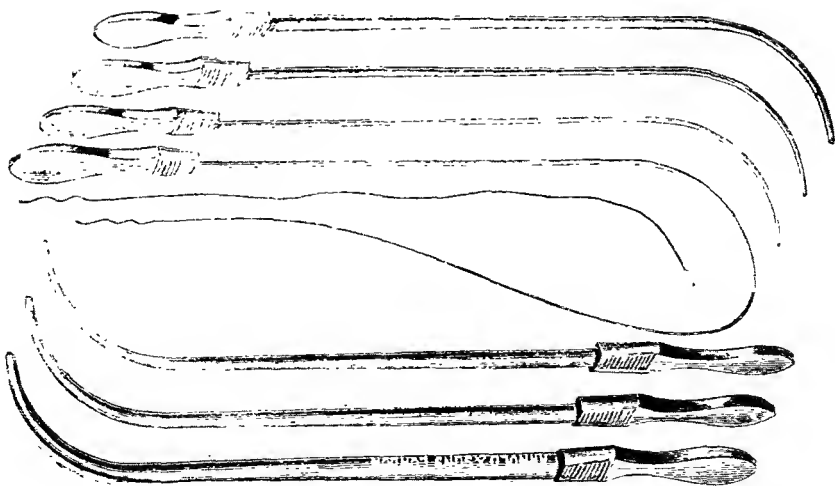
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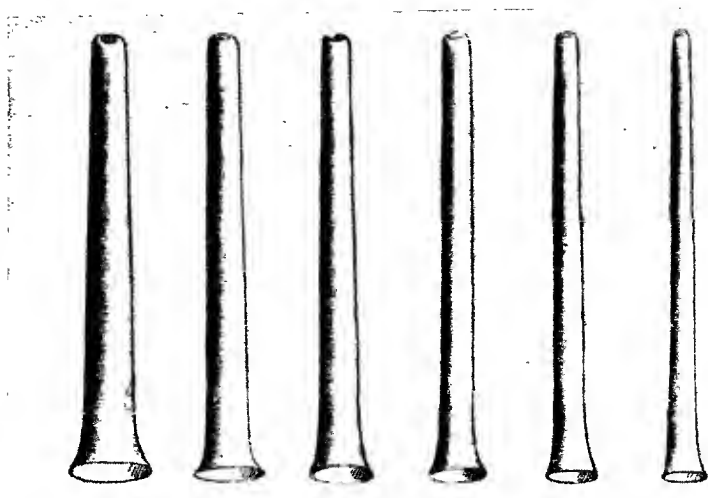
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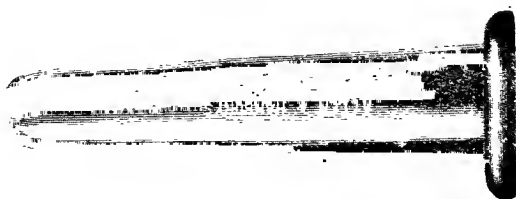
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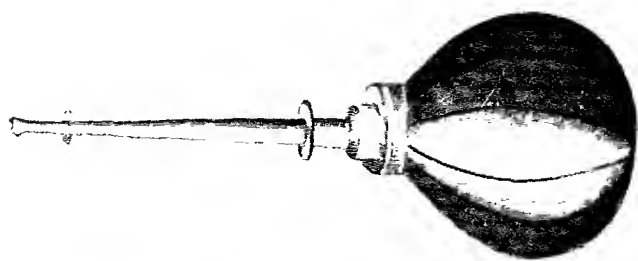
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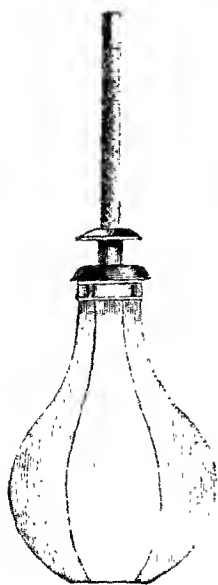
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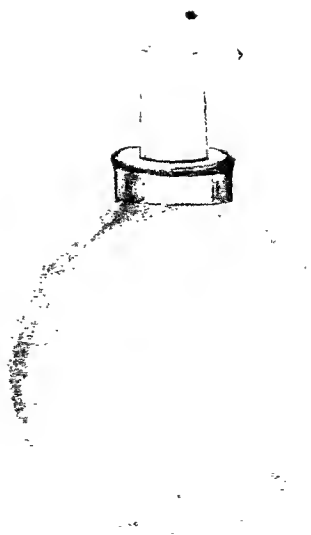
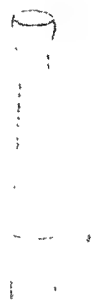
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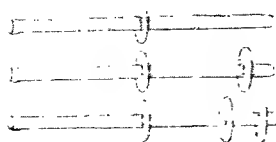
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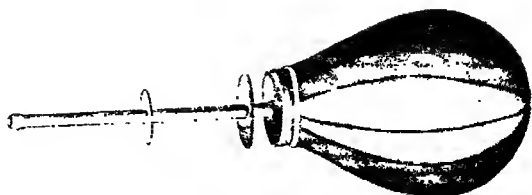
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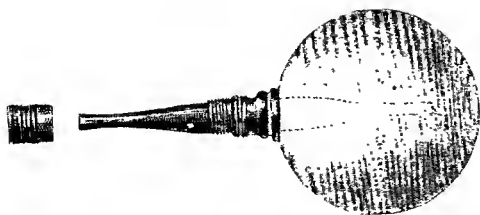
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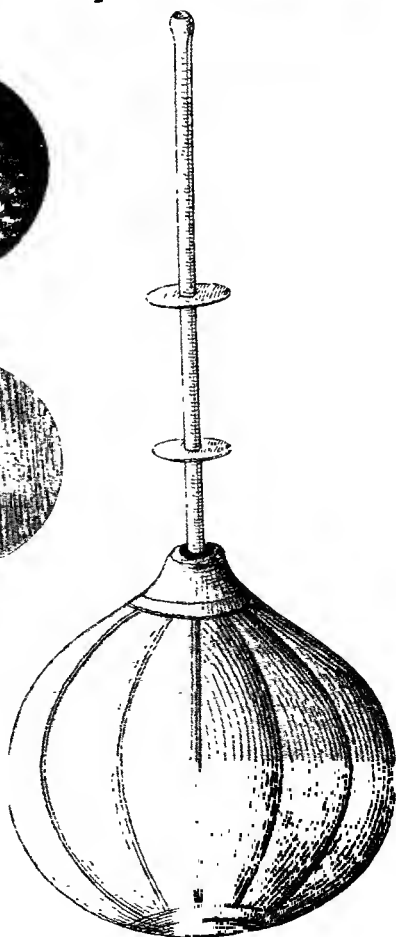
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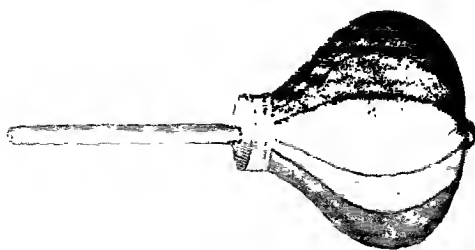
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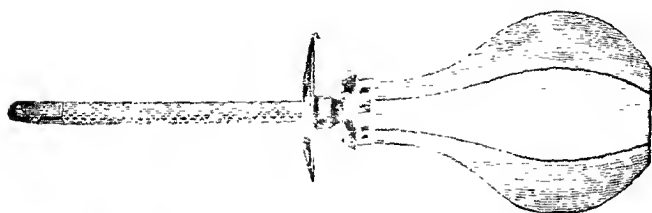
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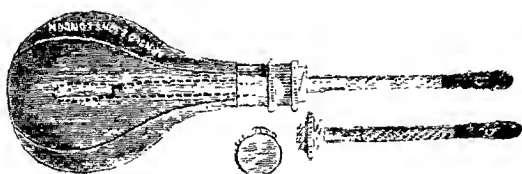
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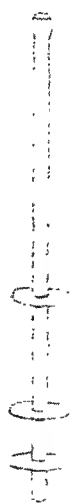
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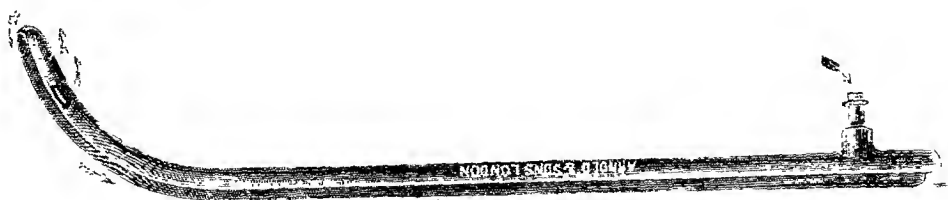
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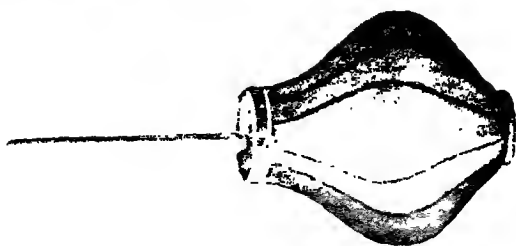
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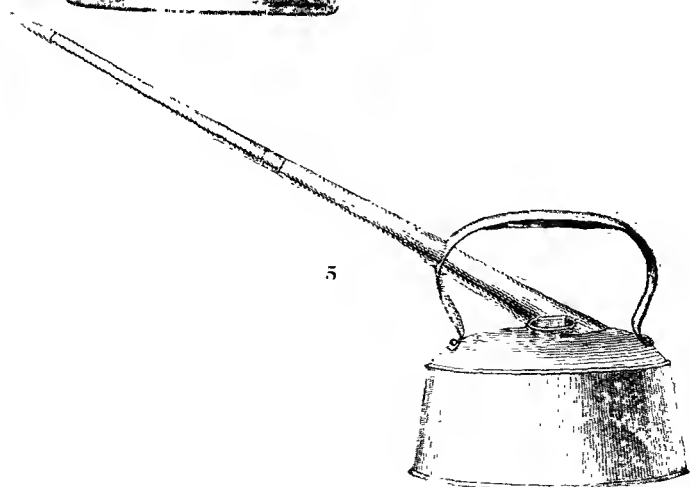
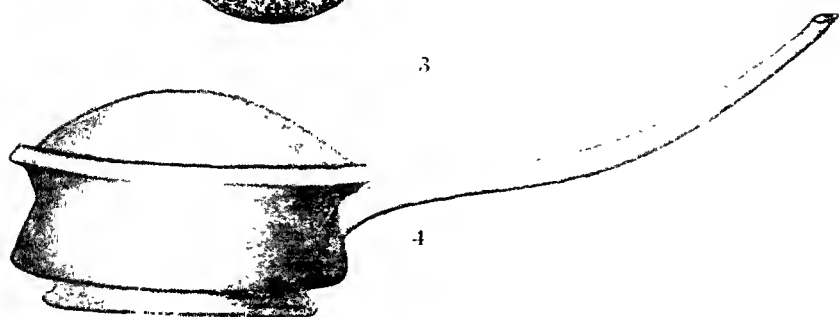
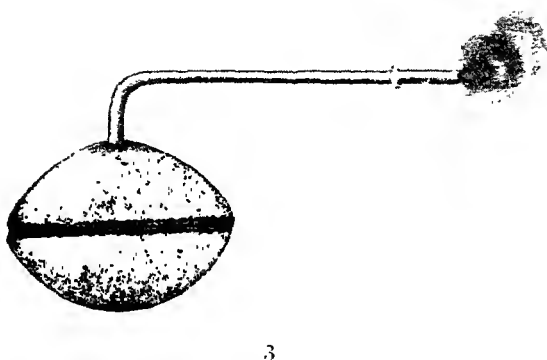


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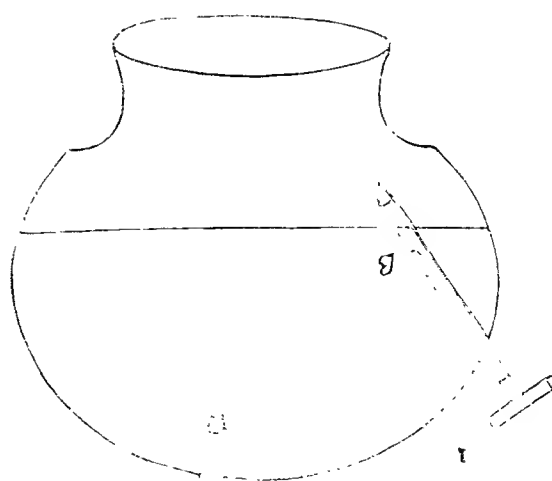
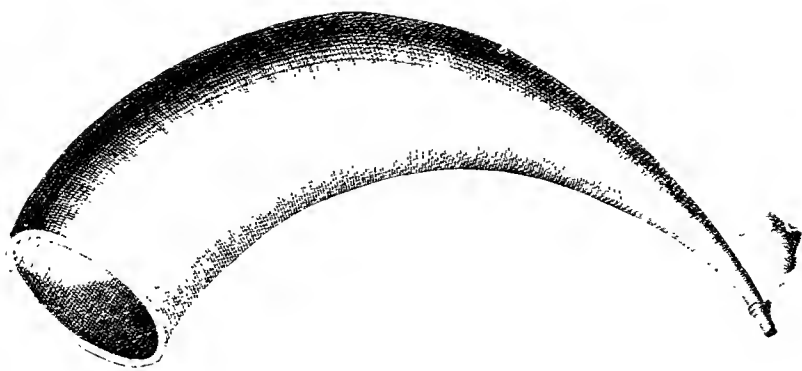


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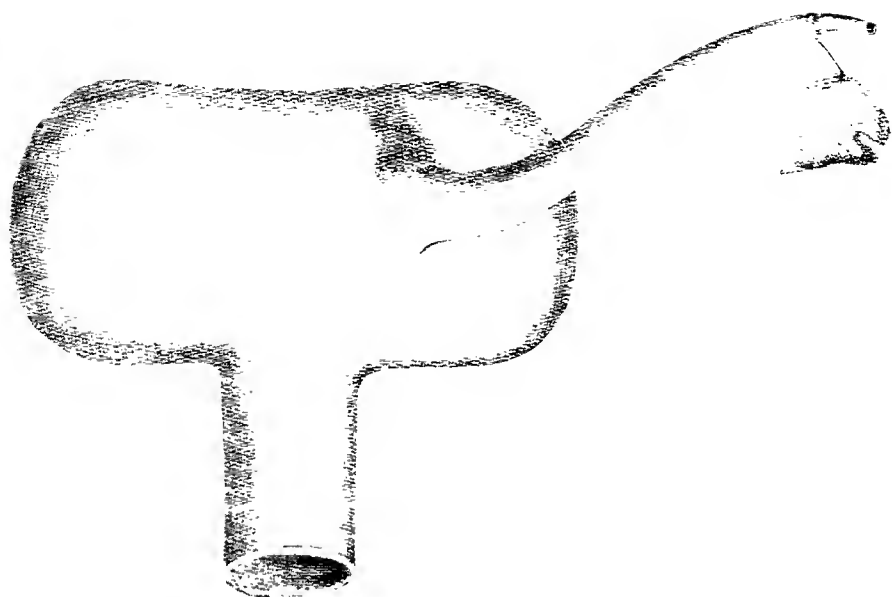
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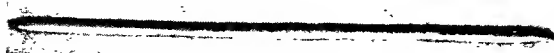
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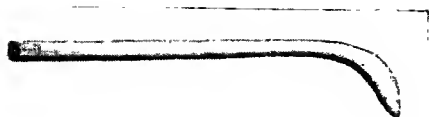
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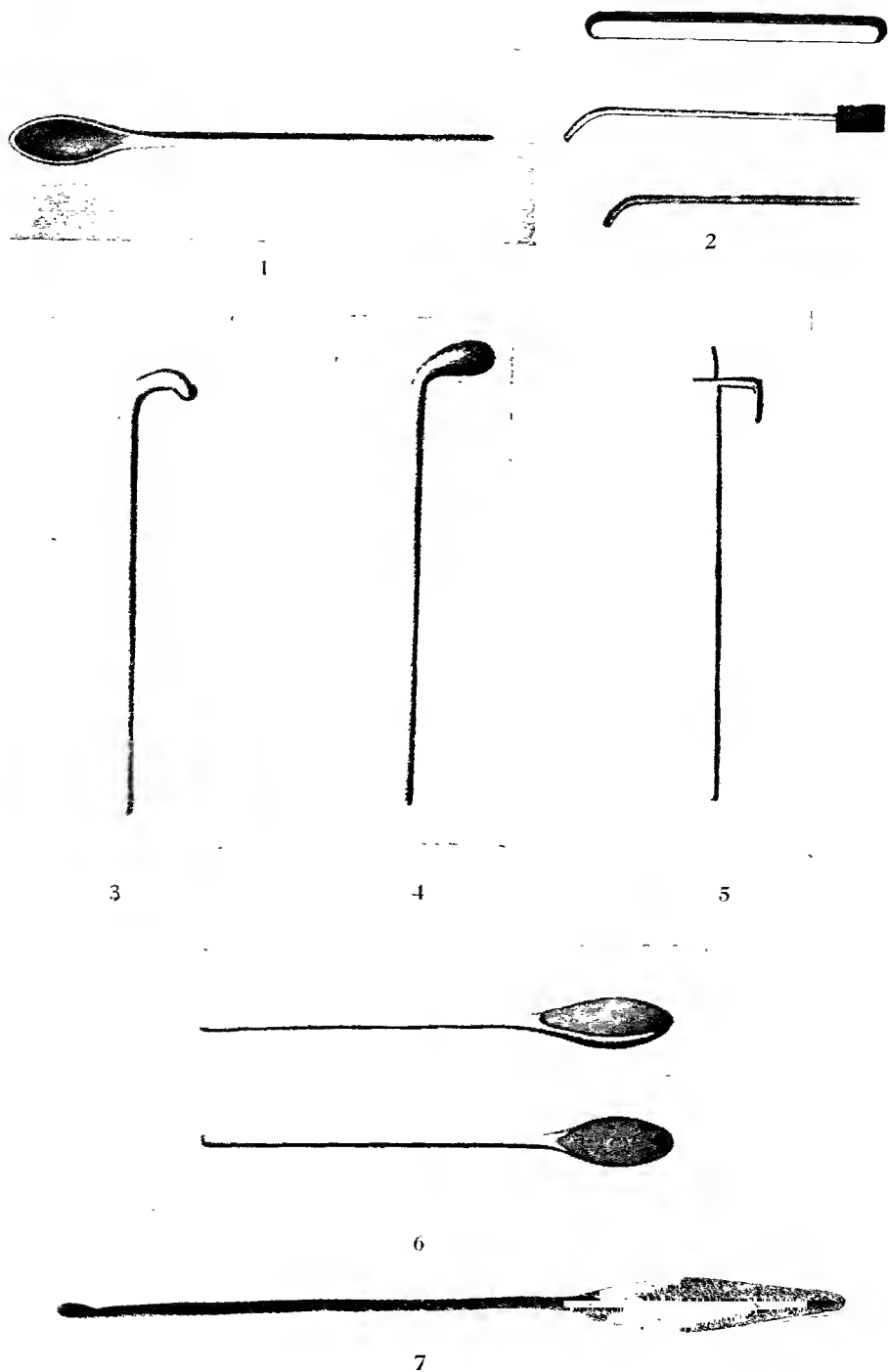


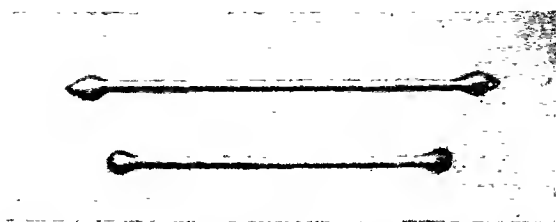
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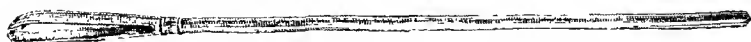
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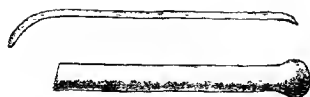
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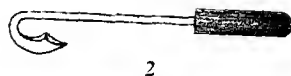
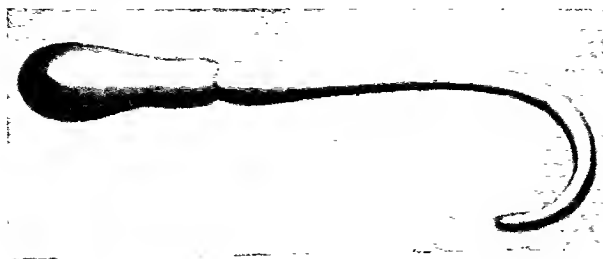
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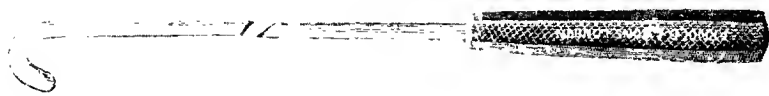
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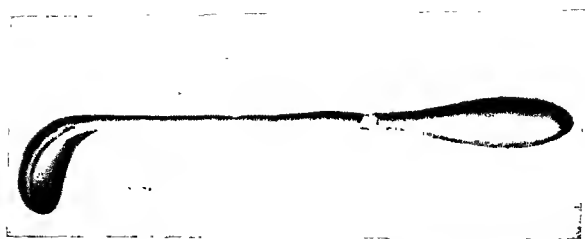
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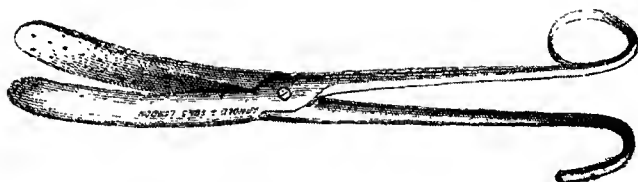
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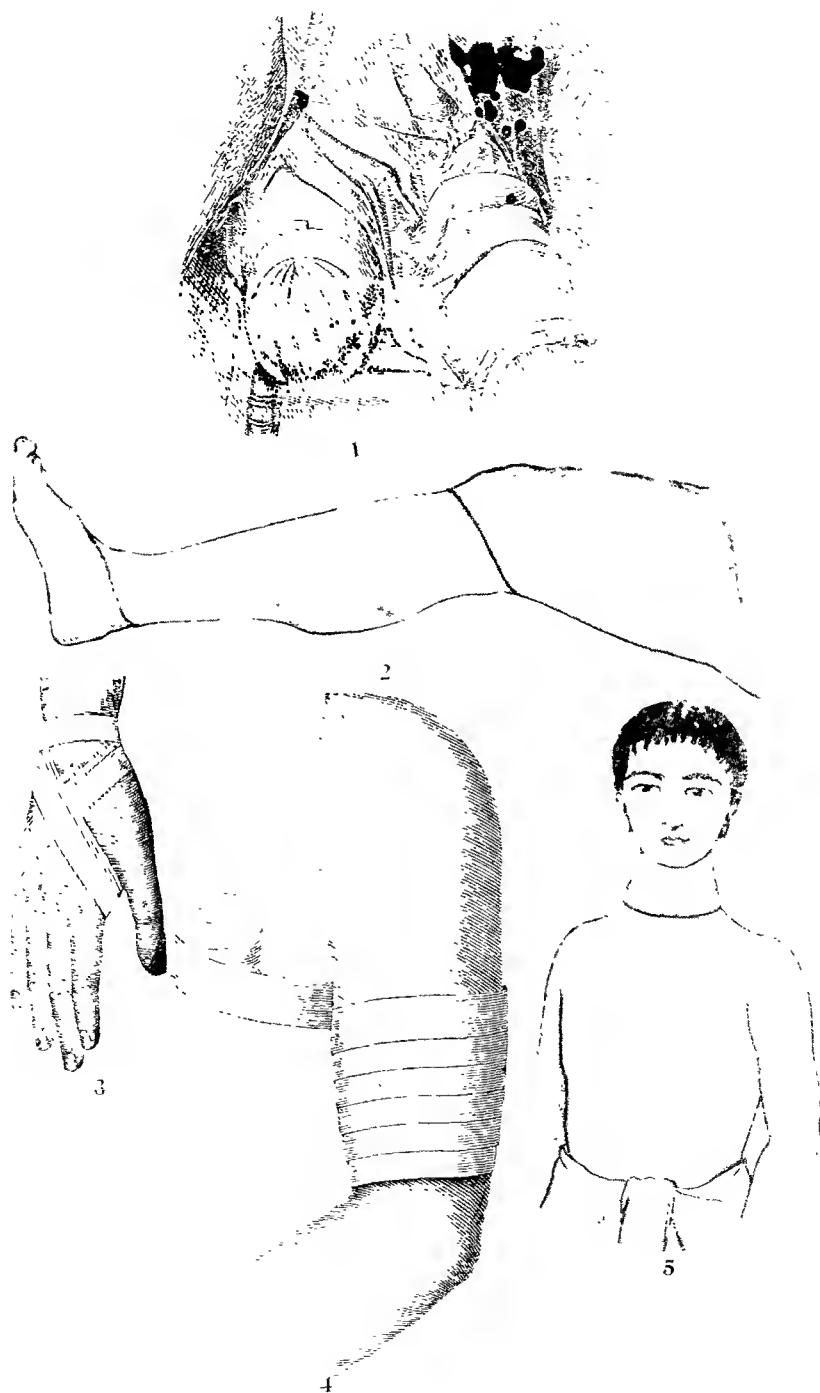


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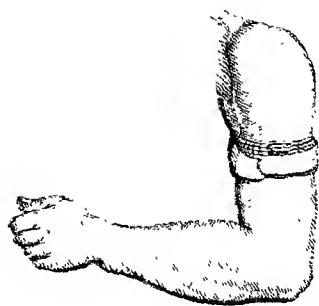
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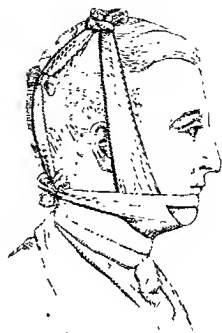
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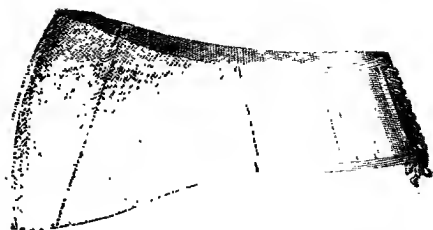
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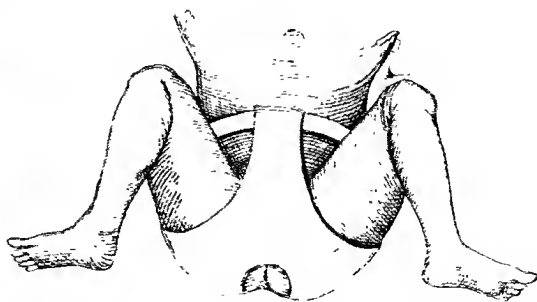
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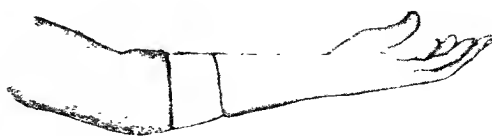
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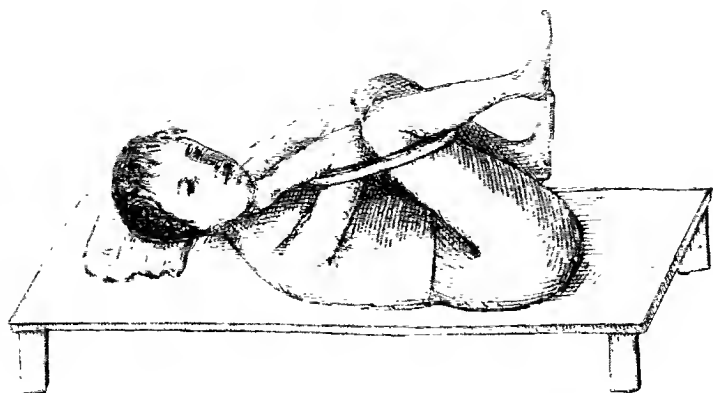
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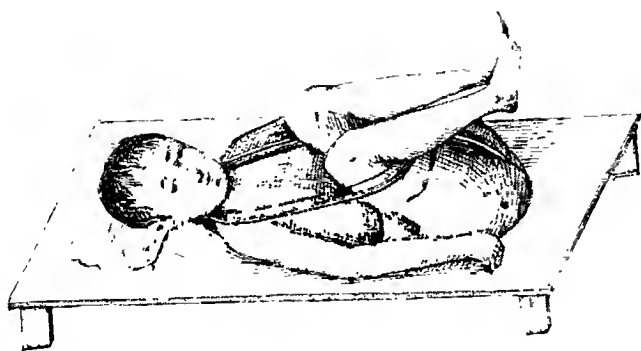
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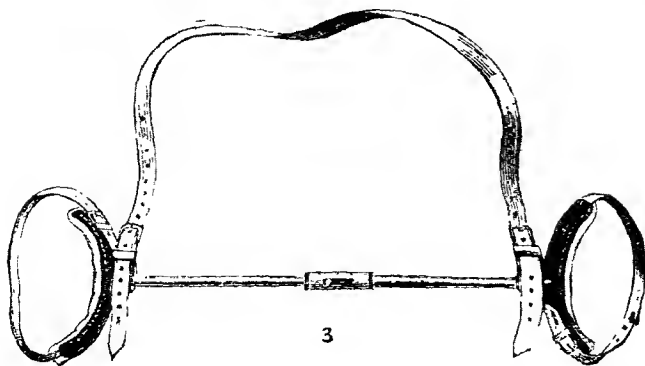
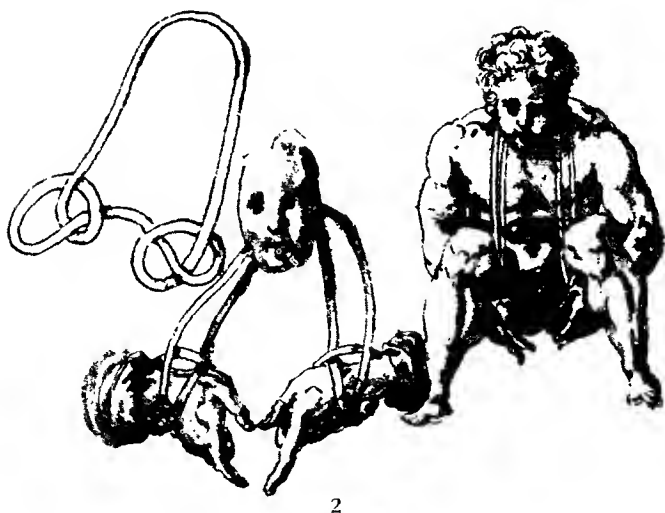
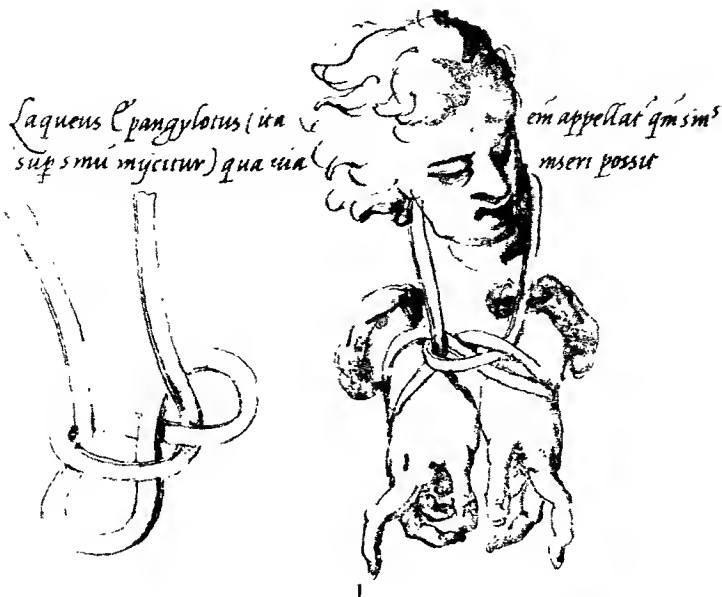


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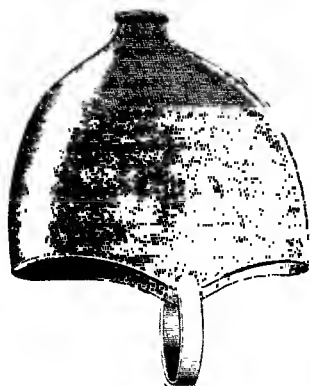
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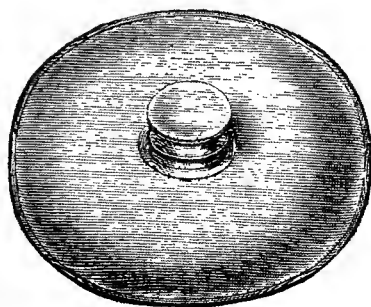
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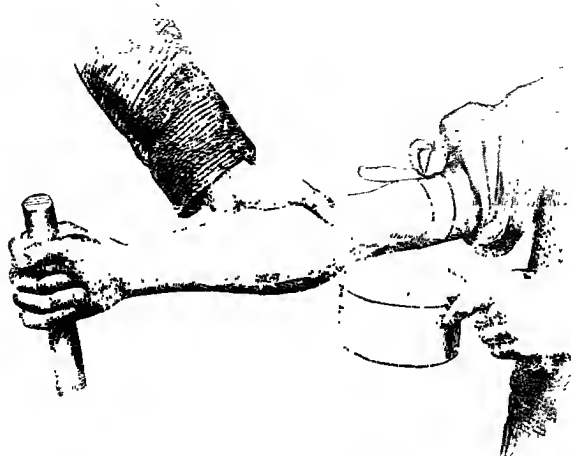
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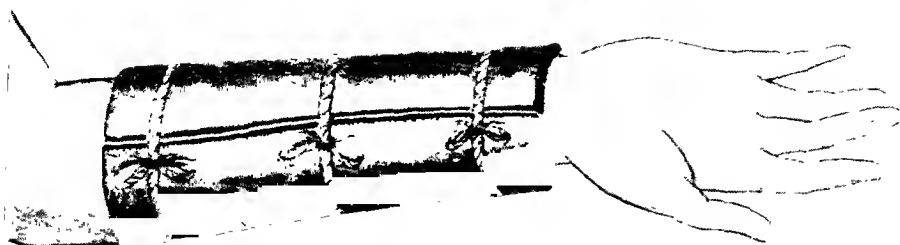
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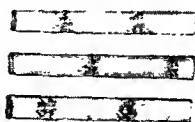
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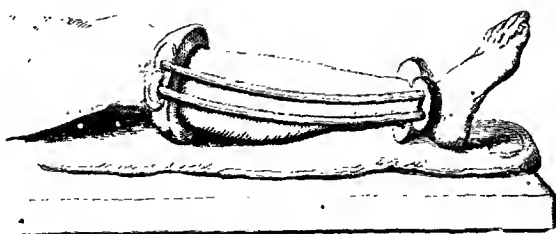
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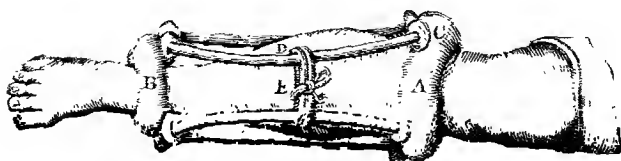
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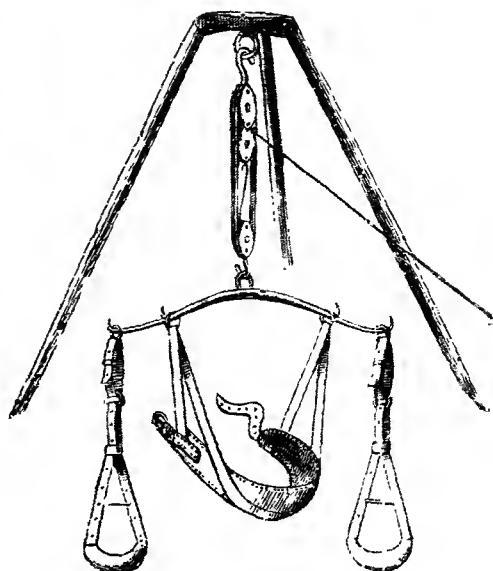
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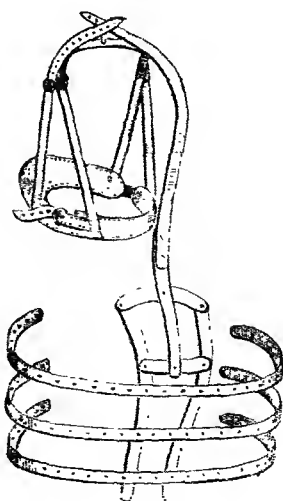
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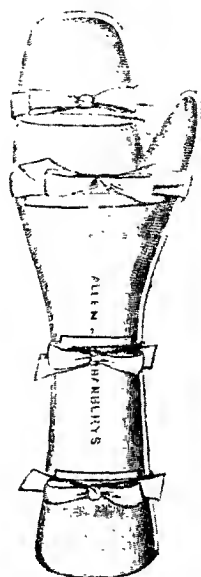
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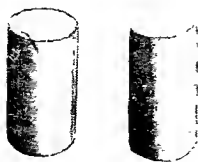
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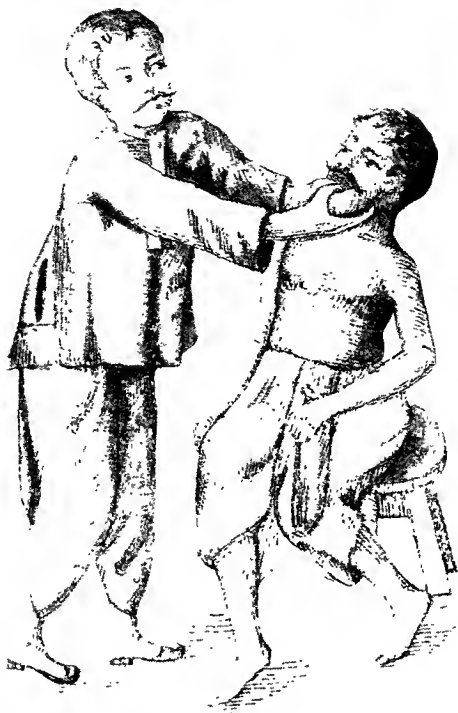
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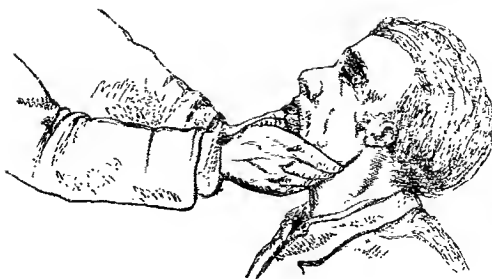
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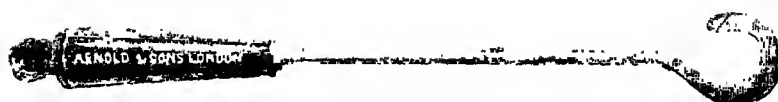
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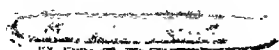
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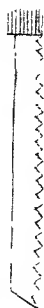
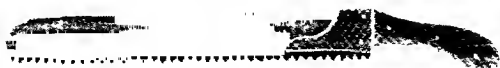
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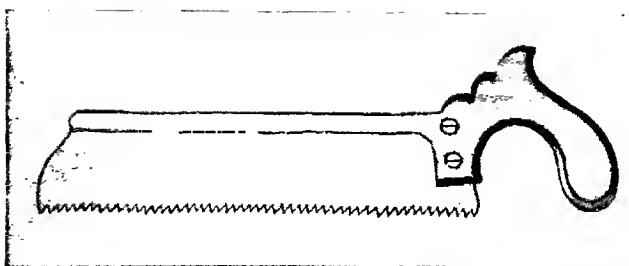
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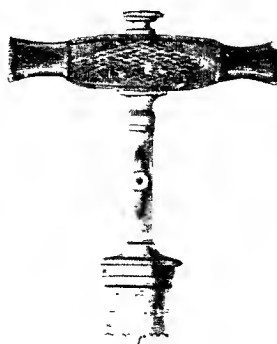
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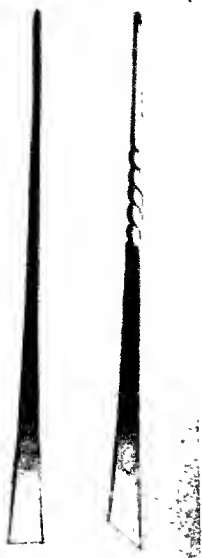
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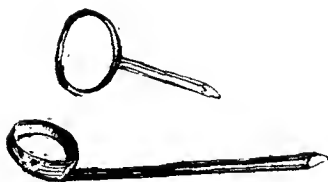
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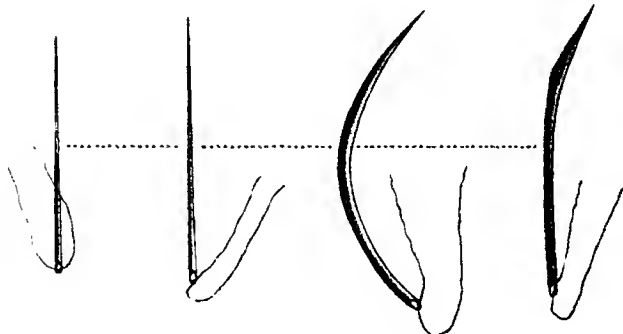
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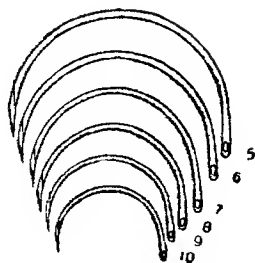
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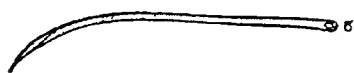
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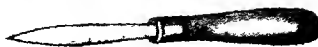
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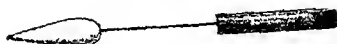
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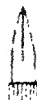
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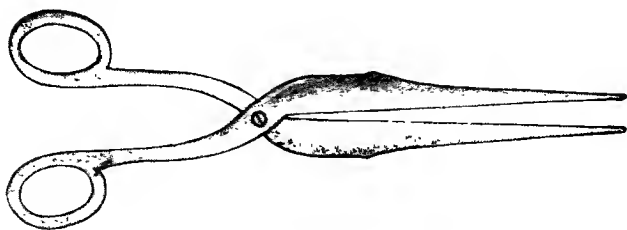
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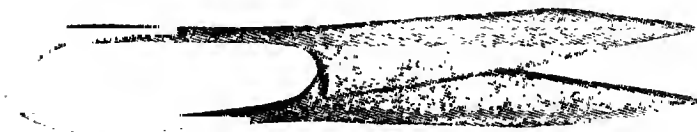
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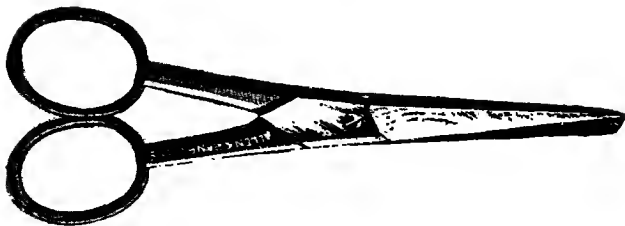
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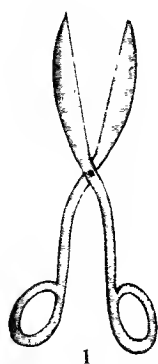
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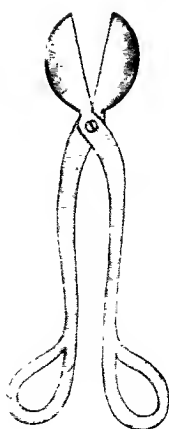
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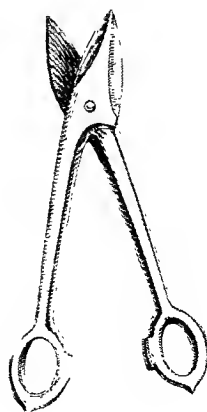
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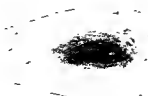


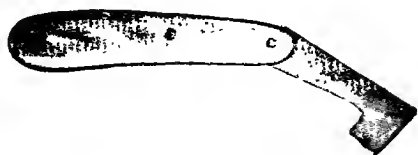
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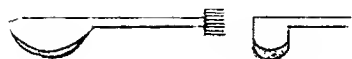
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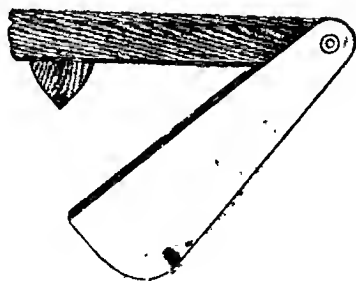
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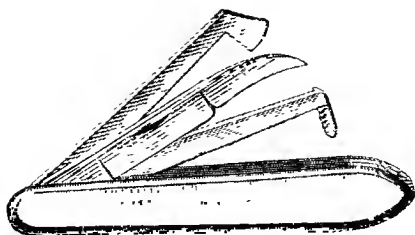
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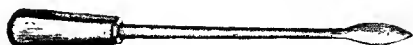
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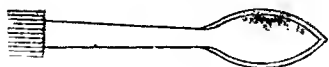
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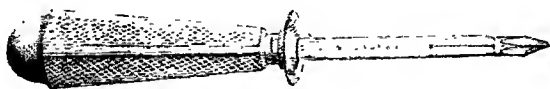
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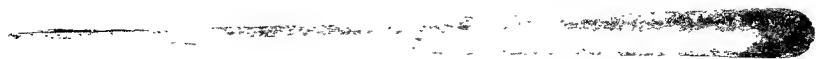
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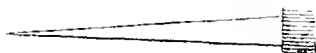
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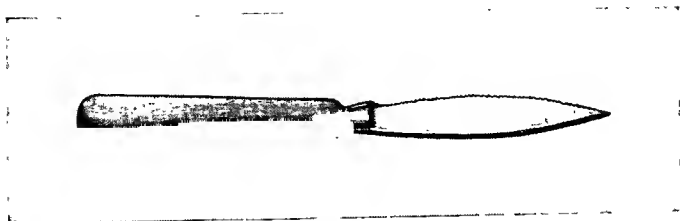
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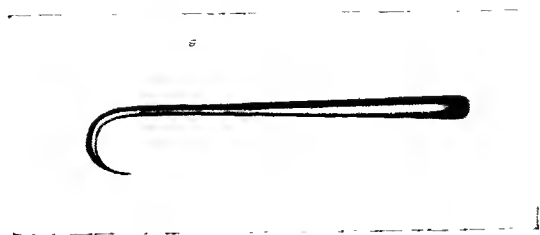
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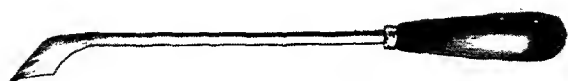
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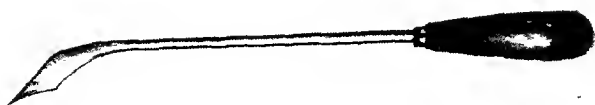
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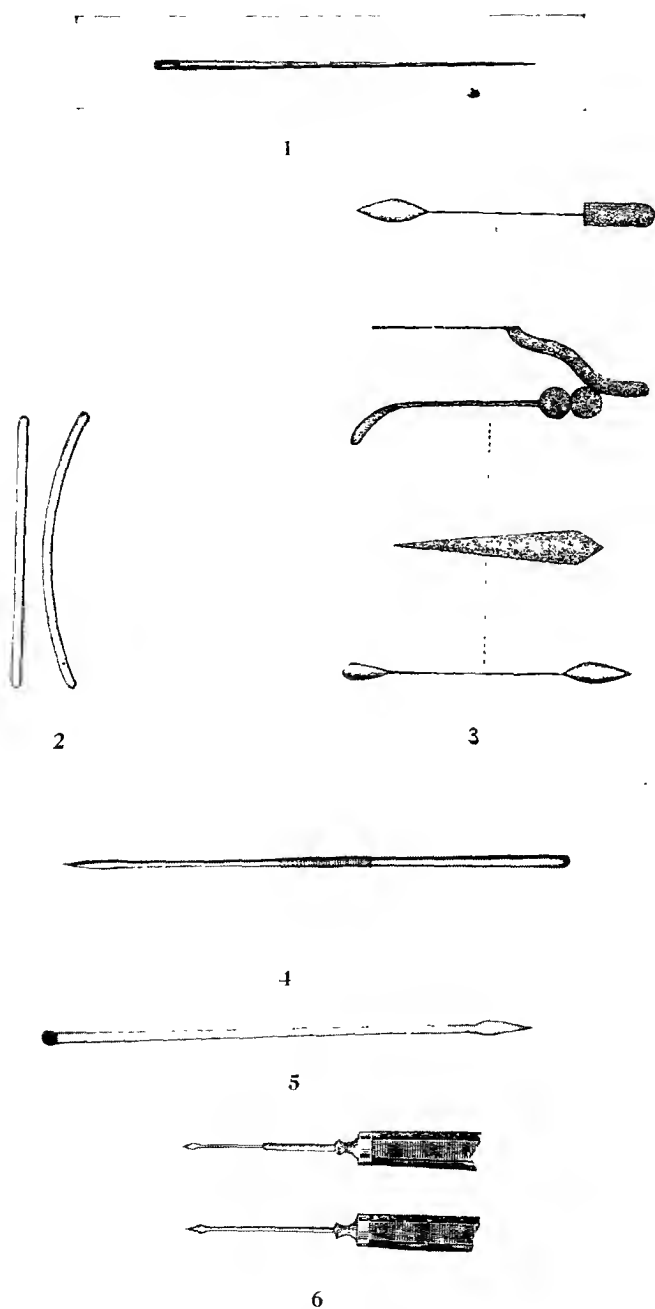


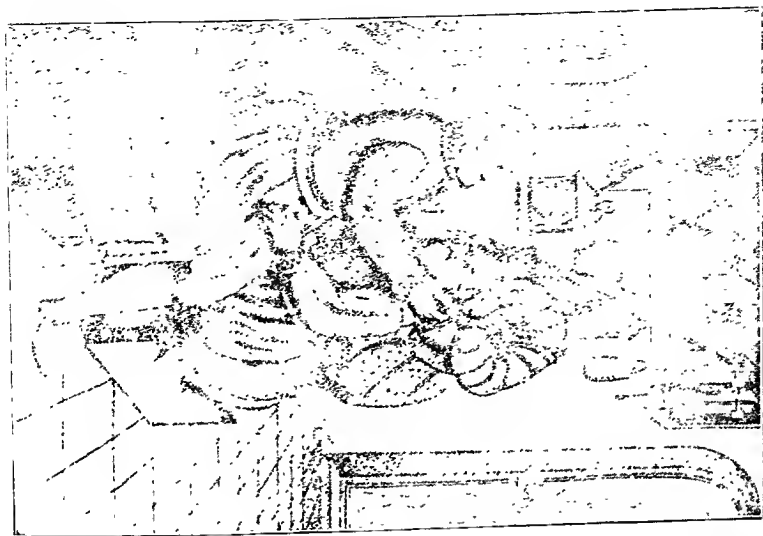
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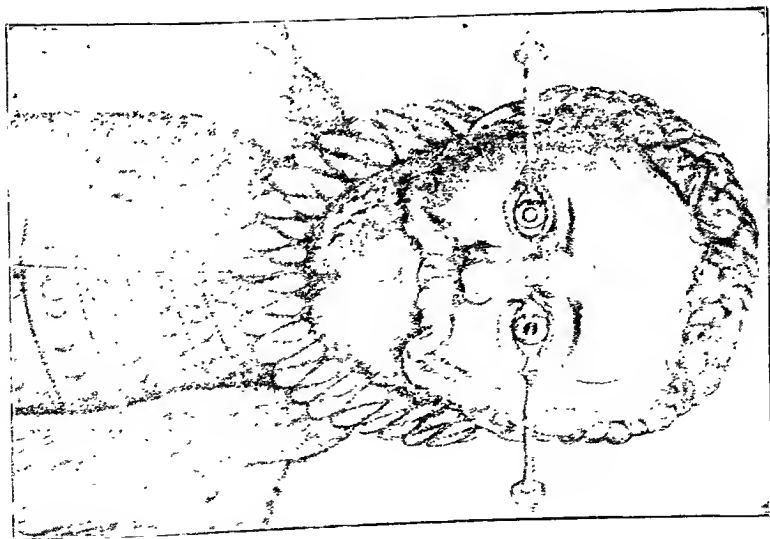
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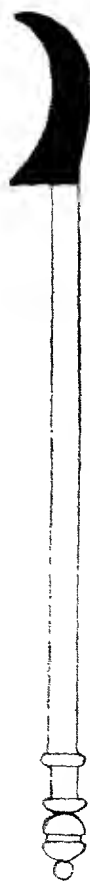
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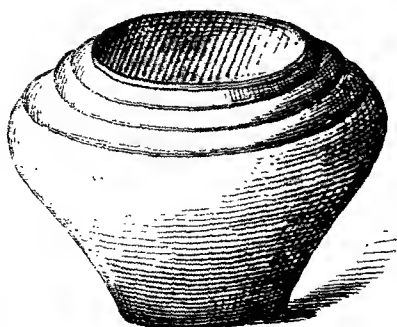
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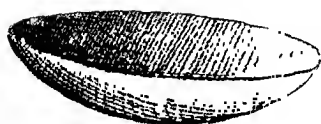
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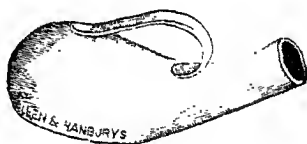
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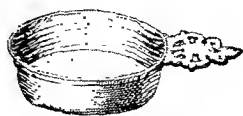
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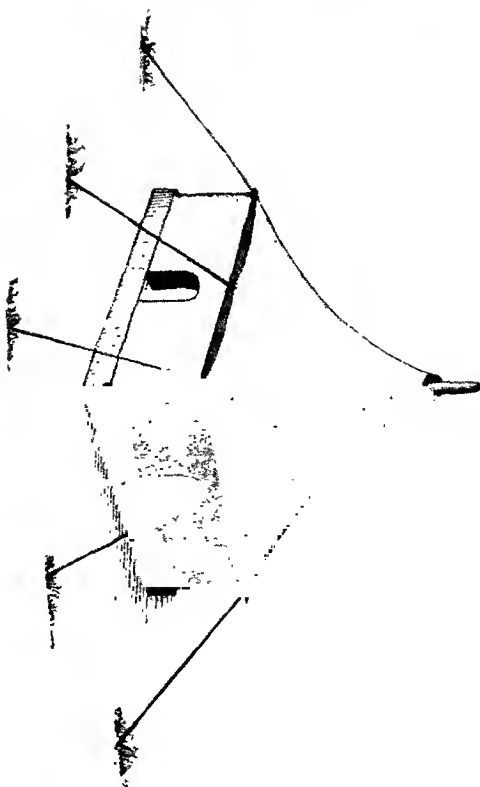
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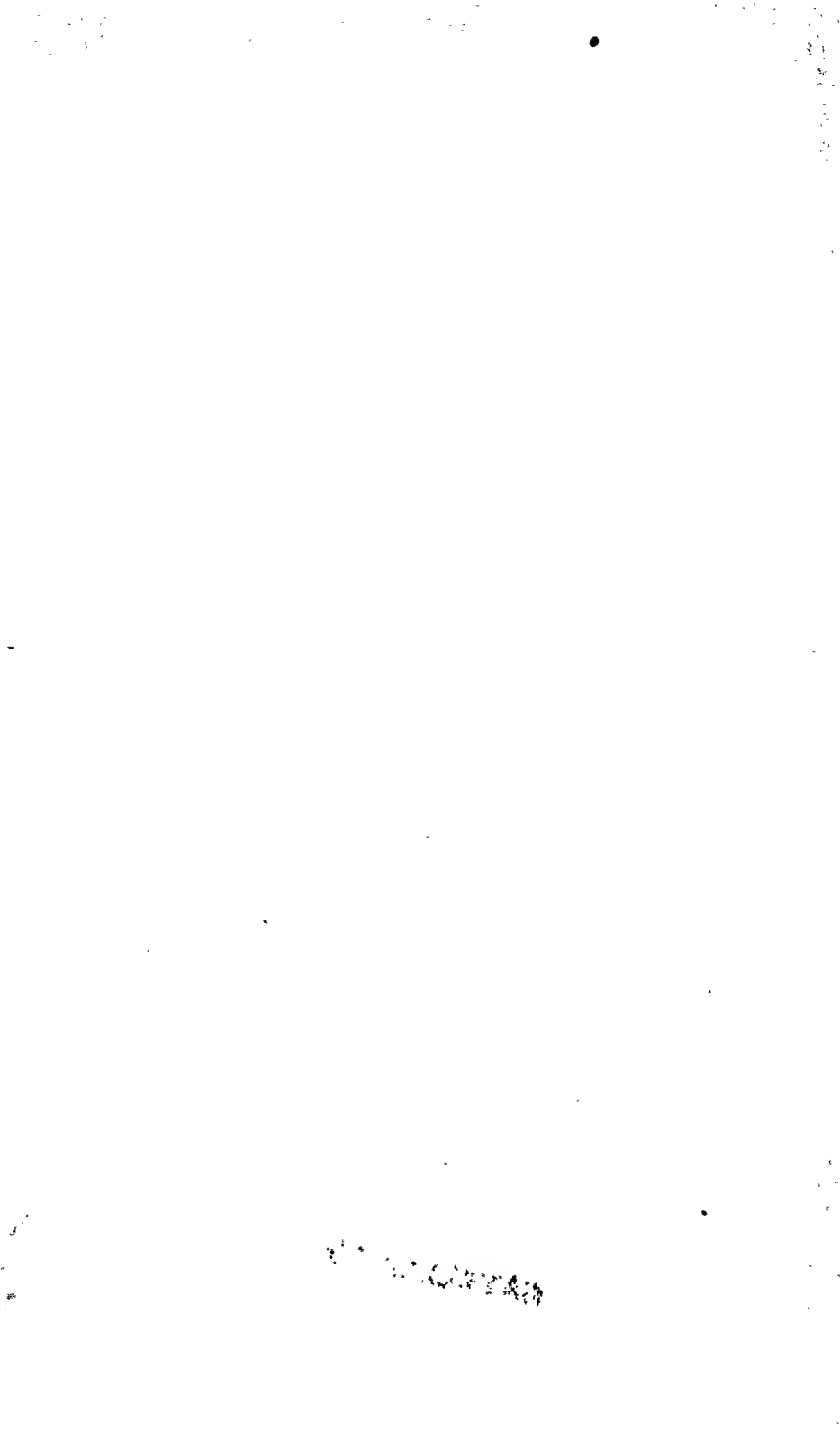


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